Student App

A. App Modules

1. Authentication & User Management

Features:

- Sign-up/sign-in (email with OTP, Google, Facebook)
- User profile with class selection and first name last name

2. Class, Subject, Chapter, Resources, Questions, Answers & Summary

Structure:

- Classes group students (e.g., Bac info, 7th grade)
- Each class has its own subjects
- Subjects contain chapters
- Chapters contain questions and resources
- Resources contain questions, answers
- Questions contain answers

Data:

- Resources, Questions, Answers: Audio, PDF, YT links, Images, Text. (And/or)

Features:

- Users can post resources under a chapter (CRUD: C: public, R: public, U: owner, D: owner).

- Users can ask questions under a chapter (CRUD: C: public, R: public, U: owner, D: owner).
- Users can ask questions under a resource (CRUD: C: public, R: public, U: owner, D: owner).
- Users can answer questions under a resource or a chapter (CRUD: C: public, R: public, U: owner, D: owner).

3. Voting System

Structure:

- Upvotes/downvotes belong to answers, resources, questions & a user.

Features:

- Users can upvote/downvote answers/resources/questions

4. Search & Filtering

Features:

- Search by selecting classes, subjects, chapters (or not), search for questions, and resources
- Filter by most upvoted, recent, unanswered/answered

5. Notifications & Engagement

Features:

- Push notifications for answers (under your resource), upvotes, questions (under your resource), bookmarked

6. Bookmark (Optional Module)

Features:

- Users can bookmark/unbookmark resources, questions, or answers for later reference.

7. Social media (Optional Module)

- Chapter & Questions & Resources 3rd Party social media comments (not managed by our DB, but a social media provider e.g., Facebook)
- Users Can Share deep links (links) from the app for resources, questions and answers.

8. Pre-populate database / Scripting (Optional Module)

- Pre-populate (class, subjects, chapters) via a text file

9. AI-Generated Summaries & Answers (Optional Module)

- **When a resource is posted** (PDF, text, image, or video), the AI analyzes the content and generates a concise summary.
- **For Questions:** When a student posts a question, the AI can use the question contents or resources or previous answers to generate an initial response. This could be a general answer or a synthesized response from multiple resources.

B. Technology

1. Tech Stack

- React Native, Typescript, Supabase, Postrgresql.